

6

|                               |                        |                     |  |
|-------------------------------|------------------------|---------------------|--|
| <b>Notice of Allowability</b> | <b>Application No.</b> | <b>Applicant(s)</b> |  |
|                               | 10/534,897             | TORRE, FRANCESCO    |  |
|                               | <b>Examiner</b>        | <b>Art Unit</b>     |  |
|                               | Paul Durand            | 3721                |  |

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the application filed 5/13/05 and interview on 8/25/06.
2. ☒ The allowed claim(s) is/are 1-12 and 14-47.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☒ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

**Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).**
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |  |   |
|--|---|
| <ol style="list-style-type: none"> <li>1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)</li> <li>2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br/>Paper No./Mail Date <u>5/13/05</u></li> <li>4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br/>of Biological Material</li> </ol> | <ol style="list-style-type: none"> <li>5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)</li> <li>6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),<br/>Paper No./Mail Date <u>20060830</u>.</li> <li>7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment</li> <li>8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance</li> <li>9. <input checked="" type="checkbox"/> Other <u>copy of amended claims.</u></li> </ol> |
|--|---|

### EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with David Farah on 8/25/2006.

a. Cancelled claim 13.

b. Replaced claims 1-12 and 14-47 with new claims 1-12 and 14-47.

*attached hereto*  
*~*

### REASONS FOR ALLOWANCE

2. The following is an examiner's statement of reasons for allowance: the process and apparatus for packaging products in a stretchable film comprised of means for simultaneously supporting and heating a product to be packaged, clamping means for clamping the film to a basculating head above the product, cutting the film when the head is in the sealed position and bending means for bending the film underneath the product is distinguished over the prior art of Bonfiglioli, which does not disclose means for supporting and heating a product prior to be packaged, nor the clamping means for clamping the film to a basculating head. The process and apparatus is also distinguished over the prior art of Owen, which discloses the film bending means, but not the support and clamping means. The process and apparatus is also distinguished over the prior art of Amberg, which discloses the clamping means, but does not

Art Unit: 3721

disclose, nor would there be any motivation to incorporate the supporting means and the bending means. The process and apparatus is also distinguished over the prior art of Halm, which discloses the supporting means, but does not disclose, nor would there be motivation to incorporate the film clamping system and bending means.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Conclusion***

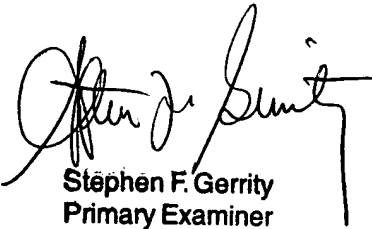
3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul Durand whose telephone number is 571-272-4459. The examiner can normally be reached on 0730-1800, Monday - Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rinaldi I. Rada can be reached on 571-272-4467. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3721

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Paul Durand  
August 30, 2006



Stephen F. Gerrity  
Primary Examiner

## CLAIMS

1. A device for packaging products in a stretchable plastic film, comprising:
  - a. means for simultaneously supporting one of the products to be packaged and for heating a lower abutment side of the products to be packaged;
  - b. means for supplying the film from storage means in a position overlaying the product to be packaged;
  - c. means for clamping the film in the position overlaying the product to be packaged;
  - d. means for contacting the clamped film with the product to be packaged, in such a way as to adhere the film to the product in a stretched position;
  - e. means for cutting the film in stretched contact with the product along the product side that is still not connected to the film coming from the storage means;
  - f. means for releasing the cut film in stretched contact with the product;
  - g. means for bending the film under the product through a bending action on a whole lower perimeter of the product, the bending means allowing the film to adhere to the product on the product lower heated abutment side;
  - h. means for removing the product packaged in the film; and
  - i. control means for checking the operations of the device.
2. The device according to Claim 1, wherein the means for contacting the clamped film with the product to be packaged comprises at least one oscillating head with a basculating movement.
3. The device according to Claim 2, wherein the basculating movement of the head is accomplished manually.
4. The device according to Claim 2, wherein the basculating movement of the head is accomplished with a motor.
5. The device according to Claim 2, wherein the head comprises a bottom that has an opening for inserting the product to be packaged.
6. The device according to Claim 2, wherein the head further comprises means for adjusting the tension of the film on the product.
7. The device according to Claim 6, wherein the means for adjusting the tension of the film comprises at least one limit sensor whose detection position is adjustable along an axis of

the head.

8. The device according to Claim 1, wherein the means for clamping the film comprises a pressing frame that is hinged to the means for contacting the clamped film and is adapted to be oscillatingly opened and closed with respect to the means for contacting the clamped film.

9. The device according to Claim 8, wherein the pressing frame comprises means adapted to perform the locking of the film.

10. The device according to Claim 9, wherein the means adapted to perform the locking of the film comprises an electromagnet integral with the basculating head and controlled by a feeler system of a limit sensor and by a related electric system, the electromagnet starting to operate when the packaging head starts to be lowered, a metallic abutment of the magnet integral with a lever connected to the pressing frame - which is attracted through an electric pulse onto the magnet thereby making the frame close and locking the plastic film with a force that is proportional to the electric current intensity operating on the magnet.

11. The device according to Claim 8, wherein the pressing frame comprises means for unlocking the film.

12. The device according to Claim 11, wherein the means for unlocking the film comprises a spring which retracts the frame to an opening position.

13. (canceled)

14. The device according to Claim 1, wherein the means for cutting the film comprises at least one retractable hot blade which is adjustable along the film length.

15. The device according to Claim 14, wherein the blade for cutting the plastic film is protected by an oscillating screen and is arranged on an oscillating blade assembly.

16. The device according to Claim 15, wherein the screen and the blade assembly are oscillating on respective springs in order to perform a film cutting that is prolonged in time, when the head is lowered and presses the hot blade assembly.

17. The device according to Claim 14, wherein the blade for cutting the plastic film comprises heating means with electric resistance under direct current or with electric pulses.

18. The device according to Claim 14, wherein the blade for cutting the plastic film

performs the film cutting with a mechanical knife.

19. The device according to Claim 14, wherein the blade for cutting the plastic film is placed on the means for contacting the clamped film.

20. The device according to Claim 1, wherein the means for supporting one of the products to be packaged and heating the product lower abutment side comprises at least one hot plane, the hot plane comprises adjustable height and adjustable temperature.

21. The device according to Claim 1, wherein the means for supporting one of the products to be packaged are fixed with respect to the means for contacting the clamped film, the means for supporting one of the products to be packaged being displaced above the means for contacting the clamped film for laying the film above the product to be packaged.

22. The device according to Claim 1, wherein the means are moving with respect to the means for supporting one of the products to be packaged, the means for supporting one of the products to be packaged being lifted to push the product against the film being kept still by the means for contacting the claimed film.

23. The device according to Claim 1, further comprises a moving retractable abutment adapted to place the product to be packaged onto the means for supporting one of the products to be packaged.

24. The device according to Claim 23, wherein the moving retractable abutment is controlled by mechanical and electromechanical mechanisms that are activated when the basculating packaging head is lowered.

25. The device according to Claim 1, wherein the means for bending the film under the product comprises packaging blades that move along an opposed alternate direction and simultaneously on the film.

26. The device according to Claim 1, wherein the means for bending the film under the product comprises packaging blades that are moving along an opposed alternate direction, non-simultaneously.

27. The device according to Claim 25, wherein the packaging blades are overlapped in pairs, with respect to each other.

28. The device according to Claim 25, wherein a movement of the blades is automatic and reciprocating, and is further controlled by limit sensors.

29. The device according to Claim 25, wherein at least one of the blades is connected, by means of two oscillating arms and two rotating pins for each arm, to at least one other blade that is longitudinally placed with respect to the head and transversally placed with respect to at least one of the blades.

30. The device according to Claim 1, further comprising means for rendering the product stationary that are adapted to keep the product still during packaging with the film.

31. The device according to Claim 1, wherein the means for supplying the film are manually operated.

32. The device according to Claim 1, wherein the means for supplying the film comprises motored rotating rollers and jaws, the rollers being mutually connected through transmission belts, a ratio-motor assembly operating on the roller to operate the transmission belts placed on the packaging head sides, the transmission belts being connected to and driving and moving the jaws that are opened and closed through a mechanical system that operates on the jaws when they reach a translation point determined by limit sensors, the limit sensors, according to their position, making the jaws translate, the jaws catching and dragging the plastic film to perform the film insertion between the plane of the packaging head and the film pressing frame, the film catching movement of the jaws automatically occurring when the packaging head is lifted in the head top stopped position.

33. The device according to Claim 1, wherein the means for contacting the clamped film are adapted to perform, in addition to the opening and closing movement through lifting and lowering, a basculating advancement and retreat movement with respect to a structure of the device, the movements of the means for contacting the clamped film facilitating the work of an operator.

34. The device according to Claim 33, wherein the means for contacting the clamped film are connected to shoulders through a toggle pin adapted to provide at one of the toggle pin ends a point fixed to the means for contacting the clamped film and at another of the toggle pin ends a pivot point rotating with the shoulders.

35. The device according to Claim 1, wherein the means for supporting and heating the product are adapted to slide along a basement of the device to facilitate the work of an operator.



36. The device according to Claim 35, wherein the means for supporting one of the products to be packaged slide onto the basement through sliding guides.

37. A process for packaging products in a stretchable plastic film, wherein the process comprises:

a. supporting and simultaneously heating one of the products to be packaged on a lower abutment side of the product;

b. supplying the film from a storage means in a position overlaying the product to be packaged;

c. clamping the film in the position overlaying the product to be packaged;

d. contacting the clamped film with the product to be packaged as to adhere the film to the product in a stretched position;

e. cutting the film in stretched contact with the product along the side of the film which is not adhered to the product;

f. releasing the cut film in stretched contact with the product;

g. bending the film under the product through a bending action on a whole lower perimeter of the product, the bending step allowing the film to adhere to the product on the product lower heated abutment side by sealing together the four edges of the film; and

h. removing the product packaged in the film.

38. The process according to Claim 37, wherein contacting the clamped film with the product to be packaged is performed by keeping the product stationary and by placing above the product the clamped film.

39. The process according to Claim 37, wherein contacting the clamped film with the product to be packaged is performed by keeping the clamped film still and by pushing the product against the clamped film.

40. The process according to Claim 37, wherein contacting the clamped film with the product further comprises adjusting the film tension onto the product.

41. The process according to Claim 37, wherein clamping the film further comprises adjusting the film locking pressure by adjusting the electric voltage on the magnet.

42. The process according to Claim 37, wherein clamping the film further comprises performing a film unlocking that is variable in time, with respect to the device cycle, and with

respect to bending the film.

43. The process according to Claim 37, wherein cutting the film is performed through cutting means and the process further comprises heating the cutting means before cutting the film.

44. The process according to Claim 37, wherein the process further comprises placing the product in a prefixed packaging position after supporting the product.

45. The process according to Claim 37, wherein bending the film under the product occurs simultaneously on all sides of the product.

46. The process according to Claim 37, wherein bending the film under the product occurs firstly on two product sides and then on two other opposing product sides.

47. The process according to Claim 37, wherein the process further comprises pressing the product to keep the product still during packaging with the film.